

## **Claims**

1. A method of accounting for printing to a sheet of media in a printing device comprising:
  - recording a type of media actually used;
  - determining an amount of pigment used on the sheet of media; and
  - calculating the cost of printing to the media by adding a cost of the sheet of media actually used and a cost of the pigment used on the sheet of media.
2. The method of accounting for printing to a sheet of media of claim 1 further comprising:
  - determining an amortized cost related to the printing device per sheet of media; and
  - adding the amortized cost to the cost of the sheet of media and the cost of the pigment.
3. The method of accounting for printing to a sheet of media of claim 1 further comprising:
  - determining an amortized cost related to an operation of the printing device; and
  - adding the amortized cost to the cost of the sheet of media and the cost of the pigment.
4. The method of accounting for printing to a sheet of media of claim 1 further comprising allocating the cost of printing to the media to an entity.
5. A method of accounting costs for use of a printing device comprising:
  - identifying an entity to which the costs will be allocated;
  - recording a type of media actually used for the entity;
  - recording a number of sheets of the type of media actually used for the entity;
  - determining an amount of pigment used on each of the sheets of media;
  - calculating a cost of the media actually used and a cost of the pigment used on all the sheets of media used for the entity; and
  - allocating the cost of the media actually used and the cost of the pigment used to the entity.

6. The method of claim 5 further comprising storing the entity identification, the type of media, the number of sheets of media of a particular type and the amount of pigment used.

7. The method of claim 5 further comprising storing the entity identification, the type of media, the number of sheets of media of a particular type and the amount of pigment used for each of the number of sheets of media in a print job.

8. The method of claim 5 wherein determining the amount of pigment used further comprises:

determining the number of dots needed to form an image on a sheet; and  
multiplying the number of dots on the sheet by an average pigment cost per dot.

9. The method of claim 8 wherein the average pigment cost differs in response to a density of each dot on the sheet.

10. The method of claim 8 wherein the average pigment cost increases in response to an increase in a density of each dot on the sheet.

11. The method of claim 5 wherein determining the amount of pigment used further comprises:

determining the number of dots of a color used to form a color pane, the color panes overlayed with one another to form an image; and  
multiplying the number of dots in the color pane by an average pigment cost per dot to allocate the cost of a pigment for a color associated with the image.

12. The method of claim 11 wherein the average pigment cost differs in response to the density of dots on the color pane.

13. The method of claim 11 wherein the average pigment cost increases in response to an increase in density of dots on the color pane.

14. The method of claim 5 wherein determining the amount of pigment used further comprises:

determining a number of dots in a first color pane; and  
    multiplying the number of dots in the first color pane by an average pigment cost per  
    dot to allocate the cost of a pigment for a first color associated with a page;  
    determining the number of dots in a second color pane; and  
    multiplying the number of dots in the second color pane by an average pigment cost  
    per dot of a second color to allocate the cost of a pigment for the second color associated with  
    a page.

15. The method of claim 5 wherein identifying an entity to which the costs will be  
allocated further comprises entering a billing code associated with the entity.

16. The method of claim 5 wherein identifying an entity to which the costs will be  
allocated further comprises entering a billing code associated with the entity and a code  
associated with a print job.

17. The method of claim 5 further comprising adding a cost of amortization of the  
printing device to the cost of the media and the cost of the pigment.

18. A method of accounting for the use of pigment in a printing device comprising:  
    separating the print job into a first color pane and a second color pane;  
    determining a number of dots in the first color pane;  
    multiplying the number of dots in the first color pane by an average pigment cost per  
    dot of a first color to allocate the cost of a pigment for the first color associated with a page;  
    determining a number of dots in a second color pane; and  
    multiplying the number of dots in the second color pane by an average pigment cost  
    per dot of a second color to allocate the cost of a pigment for the second color associated with  
    a page.

19. The method of claim 18 wherein the average pigment cost of the first pigment varies  
in response to the density of dots on the first color pane.

20. The method of claim 18 wherein the average pigment cost of the first pigment  
increases as the density of the dots increases.

21. The method of claim 18 herein the average pigment cost of the first pigment varies in response to the density of dots on the first color pane, and the average pigment cost of the second pigment varies in response to the density of dots on the second color pane.

22. A computer program product for use with a computer associated with a printing device, the computer program product comprising a computer usable medium having a set of instructions for causing the computer to:

determine a number of dots in a first pane of a page of a print job; and

multiply the number of dots in the first pane by an average pigment cost per dot to determine the cost of a pigment associated with the first pane of a page.

23. The computer program product for use with a computer associated with a printing device of claim 22, wherein the computer usable medium further causes the computer to:

record a type of media actually used; and

calculate a cost of the pigment used on a cost of the media.

24. The computer program product for use with a computer associated with a printing device of claim 23, wherein the computer usable medium further causes the computer to:

amortize the cost of the printing device on a per operation basis; and

add the amortized cost to the cost of the pigment and the cost of the media.

25. The computer program product for use with a computer associated with a printing device of claim 22, wherein the computer usable medium further causes the computer to:

determine a number of dots in a second pane of a page of a print job; and

multiply the number of dots in the second pane by an average pigment cost per dot to determine a cost of a pigment associated with the second pane of the page;

record a type of media actually used;

determine a cost of the media actually used; and

calculate a cost of the pigment used and a cost of the media.

26. A system for allocating costs associated with operation of a printing device comprising:

a data storage system for storing information regarding a cost per sheet of media associated with the printing device, and a cost of pigment associated with the printing device; and

a data processing system coupled to said data storage system and operative to receive a print job and to record an actual number of sheets of media used to execute a print job and to record an amount of pigment used on each sheet of media for execution of the print job, the data processing system multiplying the actual number of sheets of media used by the cost per sheet of media and adding the cost of pigment for each of the pages to determine a cost associated with the print job, the data processing system further operative to allocate the cost of the print job to an entity.

27. The system for allocating costs according to claim 26, wherein said data storage system stores the cost of the pigment as a cost per dot of pigment, and wherein the data processing system records a number of dots per page and multiplies the number of dots on a particular page by the cost per dot to determine the cost of pigment per page.

28. The system for allocating costs according to claim 27, wherein the cost of pigment varies as a function of the density of dots on a page varies.

29. The system for allocating costs according to claim 26, wherein the data storage system also stores an amortized cost for wear on the printing device based on the number of sheets of media anticipated to be printed over the life of the printing device, the amortized cost on a per sheet of media basis, the data processing system adding the amortized cost per sheet of media to the cost of the sheets of media and the cost of the pigment.

30. The system for allocating costs according to claim 26, wherein allocating the cost of the print job to an entity includes storing a billing code in the data storage system associated with the entity, the data processing system reading a billing code associated with the print job and allocating the cost of the print job to the entity associated with the billing code.

31. A method for determining the costs associated with a print job comprising:

providing a per page cost of a first media, a per page cost of a second media, a cost of pigment, and a per page amortized cost of a printing device; and

requesting fulfillment of a print job and, after fulfilling at least a portion of the print job, the printing device determining the cost associated with each page based on the actual pigment used and the use of either a first media or the second media and a per page amortized cost for using the printing device.